REMARKS

Claims 1-93 are currently pending. Claims 1-93 stand rejected. Applicant reserves the right to pursue original and other claims in this and in other applications.

Claims 1-93 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hinoda (U.S. Pat. No. 4,547,074) ("Hinoda") in view of Kim et al (U.S. Pat. No. 6,285,020) ("Kim"). This rejection is respectfully traversed.

Claim 1 recites, inter alia, an image sensor pixel comprising: "a semiconductor substrate; a photoconversion device formed within said semiconductor substrate; a dielectric layer formed over said photoconversion device; and a mesh optical filter positioned over said dielectric layer and photoconversion device for passing light of a specific wavelength to said photoconversion device."

Hinoda discloses a "color sensing device comprising four photo-electric transducers formed on a semiconductor substrate, an interference filter provided on the light receiving face of each transducer, a colored filter for selecting a specified transmission band of the interference filter, and three electrodes for delivering electric signals from the transducers individually, one of the electrodes being provided for two of the transducers in common." (Hinoda, abstract).

The invention of Hinoda requires the use of solid colored filters to select the light to pass through its associated filters. (Hinoda, Col. 4, ln. 1-30). Therefore, contrary to the assumption in the Office Action, this does not mean that Hinoda passes a range of wavelengths. By contrast, Hinoda uses solid color filters in its selection of what light should be permitted to pass through, where the color of the solid filter corresponds to the light that is desired to pass through. The mesh filters of the claimed invention select the light without the use of solid color filters. "Metal mesh

filters...may be designed to filter electromagnetic radiation according to wavelength." Spec., Para [0007]. It is the number, size and arrange of the apertures of the mesh filter that correspond to the filtered light. (Spec., para. [0040]) Thus, Hinoda fails to disclose "a mesh optical filter positioned over said dielectric layer and photoconversion device for passing light of a specific wavelength to said photoconversion device." As such, the solid color filters of Hinoda are different from the mesh filters of the claimed invention.

Kim discloses an "Enhanced Optical transmission apparatus with improved intersurface coupling." (Kim, Title) Kim fails to disclose "a mesh optical filter positioned over said dielectric layer and photoconversion device for passing light of a specific wavelength to said photoconversion device." Contrary to the statement by the Office Action, Kim, similar to Hinoda, discloses the use of solid color filters "for passing light of a specific wavelength." This can be seen where Kim discloses that the film serves as the color filter and being "opaque in the wavelength of interest," (Kim, Col. 3, lines 27-29), which is different from the claimed invention which employs the number, size and arrange of the apertures of the mesh filter to select the light to be filtered. (Spec., para. [0040]). As such, the metal film of the invention of Kim are different from the mesh filters of the claimed invention. Therefore, Kim does not cure the deficiencies of Hinoda and the rejection of claim 1 based on Hinoda, in combination with Kim, should be withdrawn.

Independent claims 21, 26, 45, 64, and 78 have similar limitations as claim 1 and are allowable for at least the reasons noted above with respect to claim 1.

Claims 2-20, 22-25, 28-44, 47-63, 65-77, and 80-81 are respectively dependant from claims 1, 21, 26, 45, 64, and 78, and are allowable for at least the reasons noted above. The rejection should be withdrawn and the claims allowed.

In view of the above, the Applicant believes the pending application is in condition for allowance.

Dated: September 14, 2006

Respectfully submitted,

By _____

Thomas J. D'Amico
Registration No.: 28,371
Gianni Minutoli
Registration No.: 41,198
DICKSTEIN SHAPIRO LLP
1825 Eye Street, NW
Washington, DC 20006-5403
(202) 420-2200
Attorney for Applicant